SEELEY INTERNATIONAL

OWNER'S MANUAL

R32 MULTI CASSETTE

(NBHV***D1S SERIES)

Braemar By SEELEY INTERNATIONAL

IMPORTANT

As with any product that has moving parts or is subject to wear and tear, it is **VERY IMPORTANT** that you maintain your air conditioner and have it regularly serviced. Accordingly, it is a condition of warranty cover for your air conditioner that you comply with all of the maintenance and service requirements set out in this manual. Compliance with these requirements will prolong the life of your air conditioner. Furthermore, it is also a condition of warranty cover that the Maintenance Schedule in the manual is filled out (by signing and dating it in the places indicated) when the item is completed.

ANY FAILURE TO CARRY OUT THE REQUIRED MAINTENANCE AND SERVICING, AND ANY FAILURE TO FILL OUT THE MAINTENANCE SCHEDULE, WILL VERY LIKELY VOID YOUR WARRANTY.

(For complete warranty terms, refer to the separate Warranty Booklet sold with the product. Alternatively, visit https://www.seeleyinternational.com/warranty/ to download the terms. Warranty terms are subject to property access and industry safety standards.)

OUTDOOR MODELS	CAPACITY COOL/HEAT
NCHV53D12	5.24kW / 5.30kW
NCHV72D13	7.30kW / 8.50kW
NCHV80D14	8.20kW / 8.80kW
NCHV10D14	10.10kW / 10.50kW

INDOOR MODELS	CAPACITY COOL/HEAT
NBHV35D1S	3.5kW / 4.0kW
NBHV45D1S	4.5kW / 5.0kW
NBHV71D1S	7.1kW / 8.0kW

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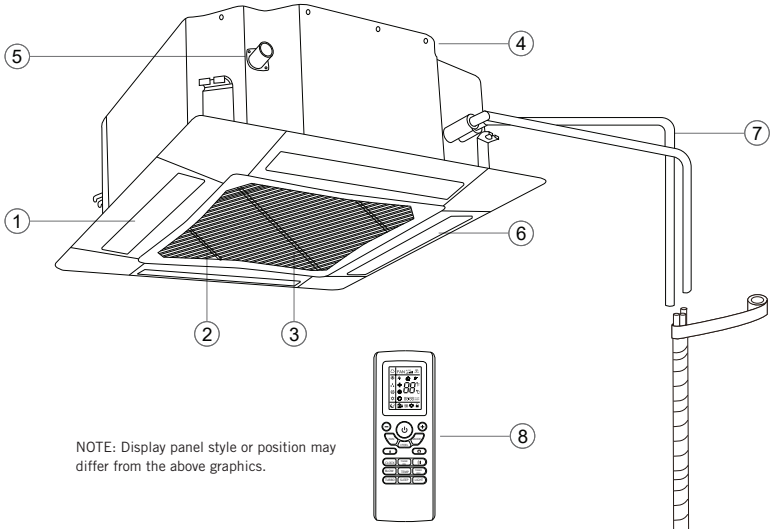
TYPICAL INSTALLATION / DIAGRAM OF KEY COMPONENTS

INDOOR UNIT



NOTE: Display panel style or position may differ from the above graphics.

OUTDOOR UNIT

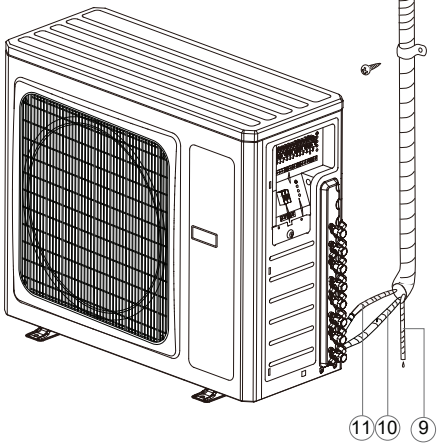


Fig. 1

1. Air Outlet
2. Air Filter (located behind Air Inlet grille)
3. Air Inlet Grille
4. Indoor Unit
5. Drain connection
6. Guide Louvre
7. Connecting Pipes
8. Remote Control
9. Condensate Tube
10. Gas Pipe
11. Liquid Pipe

INTRODUCTION & SAFETY

Congratulations on purchasing a new Braemar Air Conditioner!

Please keep this Manual and the Warranty Booklet in a safe place, along with the original purchase documents, plus all relevant certificates of compliance relating to the installation work performed. Please register the Warranty straight away, by following the steps set out in the Warranty Booklet.

The installer must read the Installation Manual before installing the Braemar Cassette Inverter Air Conditioning Unit. The home owner/user should read the Owner's Manual before operating the Unit.

To ensure the warranty on the Unit is continued and valid, the Unit must be checked and serviced by a Qualified Licensed Technician as per the requirements in the Maintenance & Service section and the Maintenance Schedule. This will also prolong the life of your air conditioner.

The home owner/user should regularly check the Air Inlet side of the Outdoor unit (see the diagram on page 2) to ensure grass, leaf and other matter are not drawn into or onto the Inlet side of the Outdoor unit. Restriction to the air flow across the coil will reduce the system's capacity, and result in high operation pressures and excessive operating costs.

The air filter should be inspected and cleaned at least every two months when the Braemar Cassette Air Conditioning Unit is used.

IMPORTANT!

THE AUSTRALIAN GREENHOUSE OFFICE HAS ISSUED VARIOUS REGULATIONS ON THE USE AND DISPOSAL OF REFRIGERANTS IN THE UNIT. FAILURE TO FOLLOW THESE REGULATIONS MAY HARM THE ENVIRONMENT AND COULD LEAD TO THE IMPOSITION OF SUBSTANTIAL FINES.

WHERE SPECIFIED, ONLY QUALIFIED AND LICENSED TECHNICIANS SHOULD PERFORM WORK ON THIS UNIT, FAILING WHICH THE WARRANTY ON THE UNIT WILL BE VOID.

WARNING! This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.

Children should be supervised to ensure that they do not play with the appliance.

If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.

Any unventilated area where the appliance is installed shall be so constructed that should any refrigerant leak, it will not stagnate so as to create a fire or explosion hazard.

OPERATION

Your Braemar Cassette Air Conditioning Unit has been designed and built with reliable, quality components. To ensure many years of trouble free, dependable service please read the following pages very carefully, and please ensure that you follow all of the instructions.

REMOTE CONTROLLER

Please follow the below cautionary notes when using the remote controller:-

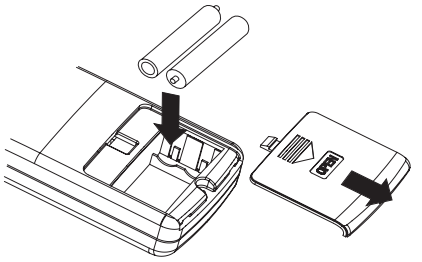
1. Ensure there are no obstructions between the cassette receiver and the remote controller.
2. Don't let the remote control drop onto hard surfaces or be subjected to sudden shocks in any way. Don't allow the remote control to get wet. The warranty does not cover misuse or accidental damage.
3. Don't place the remote control in direct sunlight, or near extremes of temperature. This will affect the control's temperature reading.
4. Don't place near strong electromagnetic waves.
5. Don't mix old and new batteries! If the remote control will not be used for a long time, remove the batteries to avoid corrosion.
6. Before operating the air conditioner, please read this manual carefully and keep it in a safe place for future reference.

NOTE: This is a generic remote control, used for multiple types of air conditioner. Not all functions shown on the remote control may be operational for this unit.

CHANGING BATTERIES

Push down on the battery panel to open the battery compartment area.

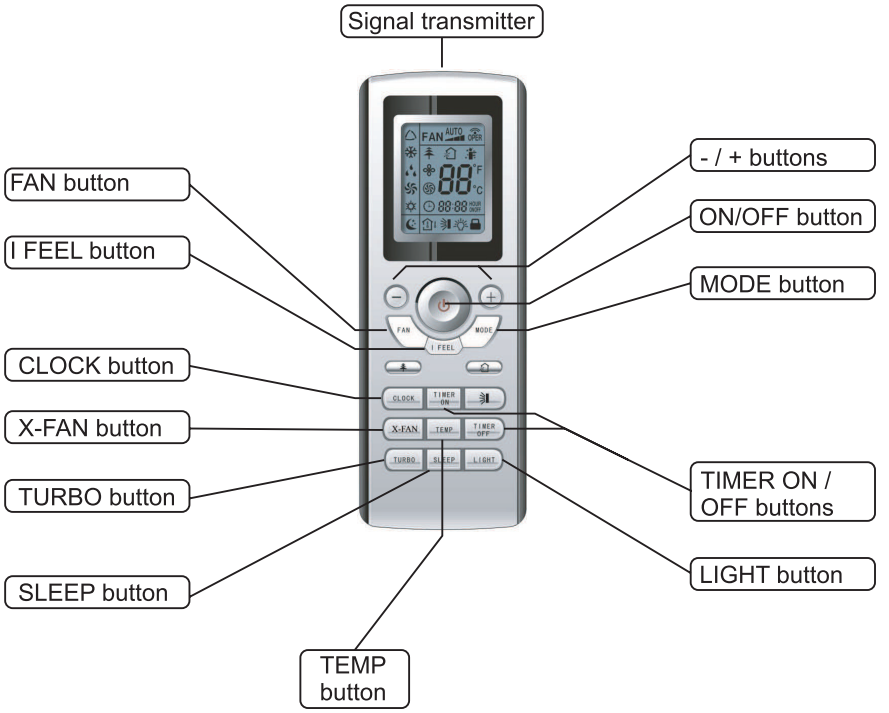
Insert 2 x AAA 1.5V batteries, ensuring the polarity aligns with the markings in the battery compartment (refer below)



If the remote controller does not activate, remove the batteries and re-insert after waiting 30 seconds.

OPERATION cont.

CONTROLLER LAYOUT



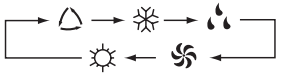
OPERATION cont.

ON/OFF

Press to turn the power on or off. SLEEP function will be cancelled when power is turned off.

MODE

Press to toggle between AUTO, COOL, DRY, FAN and HEAT modes. The remote controller & indoor will display the below icons:-



- AUTO Mode - cycles between COOL and HEAT modes depending on ambient temperature.
- COOL Mode - refrigerated cooling
- DRY mode - for extracting moisture from the air.
- FAN mode - Fan only operation (no cooling).
- HEAT mode - reverse cycle heating

FAN SPEED

Press the FAN button to toggle between AUTO, Low, Medium and High speed.

AUTO fan speed is default on power up. In DRY mode, only Low FAN speed is selected.

CLOCK

Press the CLOCK button to set the clock time. will flash on the display, and the clock can be adjusted by pressing the + or - buttons. Once the correct time is set, press the CLOCK button again to confirm the clock setting. will be displayed continuously, this indicates the clock time is set. '12:00' is the default setting after power up. Set the correct time to enable the TIMER function to work correctly.

TEMP

Press the TEMP button to toggle between the following on the indoor display:-

- SET temperature (room target temperature)
- Indoor ambient temperature

Note: remote controller will always display the SET temperature.

+/- BUTTONS

Use to adjust the SET temperature within the range 16-30°C (61-86°F). Hold the button down for quick adjustment.

Note: TEMP adjustment is unavailable in AUTO mode.

OPERATION cont.

X-FAN

The X-FAN function can be used in COOL or DRY modes, so as to power is turned off (so as to remove excess moisture from the indoor coil). The  icon will be displayed. Default setting is X-FAN 'OFF', and is not available in AUTO, FAN or HEAT modes. It is the same as BLOW function on the wired controller.

TURBO

When the unit is first turned on in COOL or HEAT modes, press TURBO to quickly reach the SET temperature. TURBO will be shown on the remote controller display. TURBO mode is cancelled if MODE or FAN speed is changed.

LIGHT

Press the LIGHT button to toggle between LIGHT ON and LIGHT OFF status. Default is LIGHT 'ON'.

TIMER SETTINGS

The unit can be programmed to turn on, turn off or a combination of both when in standby or power ON modes. Use the below settings.

TIMER ON

Press the TIMER ON button to enter the setup. The  icon will disappear and "ON" will blink on the remote controller display. Use the - or + produce rapid adjustment. When complete, press the TIMER ON button again to set.

Pressing the TIMER ON button again will CANCEL the TIMER ON function.

TIMER OFF

Press the TIMER OFF button to enter the setup. The  icon will disappear and "OFF" will blink on the remote controller display. Use the - or + buttons to adjust the clock time for the unit to stop. Holding these buttons down will produce rapid adjustment. When complete, press the TIMER OFF button again to set.

Pressing the TIMER OFF button again will cancel the TIMER OFF function.

I FEEL

Press the I FEEL button have the remote control act as a local temperature sensor - instead of the room temperature being sensed at the wall control, it will respond to the temperature wherever the remote control is placed. When using the I FEEL function, keep the remote control in the air conditioned space in an unobstructed line to the wire wall control.

Press the I FEEL button again to cancel this feature.

SLEEP

Press the SLEEP button to activate SLEEP ON or SLEEP OFF modes.

OPERATION cont.

ERROR DISPLAY

Your unit is supplied with self- diagnostic controls to identify when a error condition occurs.

When an error occurs to the unit, the error code will be shown on the wired controller. If multiple errors occur simultaneously, the error codes will be shown cyclically on the display

A typical error message is shown- “E1” means the high pressure protection is activated. A full list of error codes is provided overleaf.

Please note the error code displayed when contacting Seeley service.

NOTE: not all error codes are displayed due to an air conditioner fault, but may also show a temporary status change (eg. defrost mode or DRED activation). Refer to the Troubleshooting section for further details.

FAULT CONDITIONS

If the below conditions should occur, please turn off the air conditioner and isolate its power immediately, and then contact the Seeley qualified service agents for assistance:-

- Power cord is overheating or damaged
- Abnormal sound during operation.
- Circuit breaker is continually tripping
- Burning smell is noticed
- Indoor unit is leaking condensate

DRED CODES

Number	DRED Code	Code Description
1	d1	DRED mode 1 (full shut down)
2	d2	DRED mode 2 (50% power)
3	d3	DRED mode 3 (75% power)

OPERATION cont.

Error codes and their meanings are shown below

Number	Error Code	Error Description
1	F1	Return air temperature sensor open / short circuited
2	F2	Evaporator temperature sensor open / short circuited
3	b5	IDU liquid valve temperature sensor open/short circuited
4	b7	Indoor gas valve temperature sensor open/ short circuited
5	P7	IPM temperature sensor open/short circuited
6	F3	Outdoor ambient temperature sensor open/ short circuited
7	F4	ODU condenser mid-tube temperature sensor open/short circuited
8	F5	Discharge temperature sensor open / short circuited
9	E6	Indoor and outdoor communication error
10	PL	DC bus under-voltage protection
11	PH	DC bus over-voltage protection
12	U1	Compressor phase current sensing circuit error
13	HE	Compressor demagnetization protection
14	Hc	PFC protection
15	P8	IPM Temperature Protection
16	L9	Over-power protection
17	F0	System charge shortage or blockage protection
18	PU	Capacitor charging error
19	E1	High pressure protection
20	E3	Low pressure protection
21	LE	Compressor stalling
22	LF	Over-speeding
23	PF	Drive board temperature sensor error
24	P9	AC contactor protection
25	PE	Temperature drift protection
26	Pd	Sensor connection protection
27	U3	DC bus voltage drop error
28	L3	Outdoor fan 1 error protection
29	LA	Outdoor fan 2 error protection
30	dc	Compressor inhalation temperature sensor error
31	P6	Drive board communication error
32	H3	Compressor overheating protection
33	LP	Indoor and outdoor units unmatched

OPERATION cont.

Number	Error Code	Error Description
34	dn	Communication line misconnected or expansion valve error
35	E7	Running mode conflict
36	Fo	Pump-down
37	CS	Jumper error
38	H1	Forced defrosting
39	Lc	Compressor startup failure
40	E4	High discharge temperature protection
41	E8	Overload protection
42	ES	Whole unit over-current protection
43	PS	Over phase current protection
44	H7	Compressor desynchronizing
45	HS	IPM Current protection
46	Ld	Compressor phase loss/reversal protection
47	F8	Frequency restricted/reduced with whole unit current protection
48	En	Frequency restricted/reduced with IPM current protection
49	F9	Frequency restricted/reduced with high discharge temperature
50	FH	Frequency restricted/reduced with antifreezing protection
51	F6	Frequency restricted/reduced with overload protection
52	EU	Frequency restricted/reduced with IPM temperature protection
53	E9	Indoor unit full water error
54	E2	Anti-freezing protection
55	PP	AC input voltage abnormal
56	U5	Whole unit current sensing circuit error
57	U7	4-way valve reversing error
58	H6	Motor stalling
59	U8	PG motor zero-crossing protection
60	U0	Indoor fan tripping error
61	Ln	Communication error between IDU and grid connection
62	Ld	Communication error between ODU and grid connection
63	Y2	Main error at grid connection side
64	Y3	IDU network address error
65	Y6	Ip address allocation overflow

MAINTENANCE & SERVICE

SAFETY

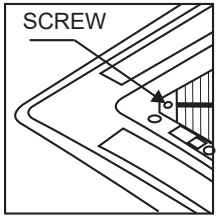
Always isolate power for the air conditioner from electricity mains before cleaning or maintenance.

AIR FILTER

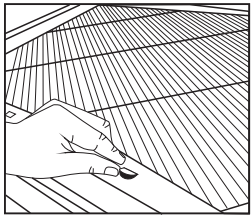
It is important to check and clean the air filter as per the Maintenance Schedule. A dirty air filter will not allow the correct amount of clean air to pass through your air conditioner, resulting in poor performance and increased running costs. Please follow the below steps:-

1. Release the central air inlet grille.
a. Screws secure the cover in place. These are located in one of two positions (model specific).

-In the corners of the grille

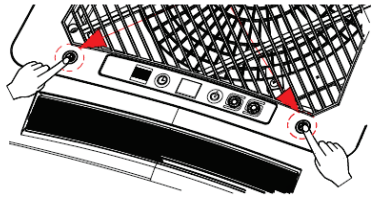


-Under screw covers located on the panel (pull the two screw covers up to remove the screws).

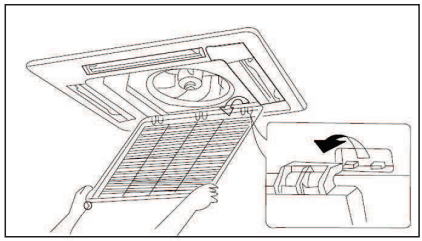


Remove the screws and set aside for reinsertion later.

b. Push the fasteners to unlock the grille from the fascia.



2. Disassemble the grille by pulling down to 45° angle and unclipping from the fascia.



3. Remove the filter mesh. Clean the filter mesh by vacuuming or washing under running water (no warmer than 45°C). Use a mixture of mild detergent and water if the filter has grease or oil buildup. Dry in the shade.

NOTE: Always ensure the filter is dry and in place prior to operating the air conditioner.

INDOOR COIL

It is advisable to have the fan and drain pump checked on an annual basis (as set out in the Maintenance Schedule overleaf). Drains can become blocked by all types of insects, and rats have been known to chew through the drain to get to the water in the pipe.

OUTDOOR UNIT

The Outdoor unit has either one or two fans, it draws air through the appliance to expel the heat generated during the cooling cycle. We recommend checking that plants haven't grown into or around the air intake or outlet, along with other debris that may build up over time, namely, leaves and the like.

REFRIGERANT

The refrigerant is the life blood of your air conditioning unit. Not only does the correct refrigerant charge provide you with reliable and economical cooling, it also provides the cooling for the compressor. A lack of refrigerant, due to a leak, will cause the compressor to overheat and expire prematurely. You will notice a decline in cooling effect and an increase in power consumption. Therefore, having a qualified, licensed technician service your air conditioner will save you money in the long term.

PLEASE REFER TO THE NEXT PAGE FOR THE MAINTENANCE SCHEDULE.

MAINTENANCE SCHEDULE

Please NOTE: The Maintenance Schedule covers Year 1 to Year 5

Installation Date:	/ /	Installer:	

Items to be done by the **Home Owner/User** (please sign in the places indicated)							
	Monthly	Annually	Year 1	Year 2	Year 3	Year 4	Year 5
Air filter cleaning	✓						
Air filter replacement		✓					
Maintain required clearance around Outdoor unit		✓					

Items to be done by a **Qualified Licensed Technician** (Home owner/user must ensure that the technician signs and dates in the places indicated)	
	Annually
Check, clean or replace filter	✓
Check drain from indoor coil	✓
Check Outdoor unit clearances – maintain garden and debris	✓
Check refrigerant charge	✓
Check refrigeration connections for soundness	✓
Check outdoor fans	✓
Check electrical connections	✓
Check overall installation	✓
Report to the home owner/user all tasks that require attention	✓

Year 1 - Date:	/ /	Technician:	
Year 2 - Date:	/ /	Technician:	
Year 3 - Date:	/ /	Technician:	
Year 4 - Date:	/ /	Technician:	
Year 5 - Date:	/ /	Technician:	

To preserve your investment for many years after the expiry of warranty, we strongly recommend that you continue to maintain and service the Braemar Air Conditioner appliance as per the items and frequency set out in the Schedule, and as indicated elsewhere in the Owner's Manual.

OPERATION TIPS

The following events may occur during normal operation:

1. **Protection of the air conditioner.**
   Compressor protection
   - The compressor cannot restart for 3 minutes after it stops.
   - The supply air drops below a pre-determined set point; this prevents the indoor coil from freezing.
2. **A white mist coming out from the Indoor unit.**
   - A white mist may generate due to a large temperature difference between air inlet and air outlet on COOL mode in an indoor environment that has a high relative humidity.
3. **Low noise of the air conditioner.**
   - You may hear a low hissing sound when the compressor is running or has just stopped running.
     This sound is the sound of the refrigerant flowing or coming to a stop.
   - You can also hear a low “squeak” sound when the compressor is running or has just stopped running.
     This is caused by heat expansion and cold contraction of the plastic parts in the Unit when the temperature is changing.
4. **Dust is blown out from the Indoor unit.**
   This is a normal condition when the air conditioner has not been used for a long time or during first use of the Unit.
5. **A peculiar smell comes out from the Indoor unit.**
   This is caused by the Indoor unit giving off smells permeated from building material, from furniture, smoke (for example if someone is cooking food), or from the duct work.
6. **FAN operation during COOL mode.**
   When indoor air temperature reaches the setting on the wired wall control, the compressor will stop operating and after approximately 60 seconds the indoor fan will stop blowing air. When the room temperature rises back to the set point, the indoor fan and the compressor will start again.

TROUBLESHOOTING

Problem	Probable Cause	Remedy
1. The air conditioner does not run.	1.1 Power failure. 1.2 Fuse blown or circuit breaker open. 1.3 Thermostat adjustment too low (in heating mode) or too high (in cooling mode).	1.1 Wait for power to resume. 1.2 Replace the fuse or reset the breaker. 1.3 Check thermostat setting.
2. There is insufficient cooling.	2.1 The room was probably very hot when you started the system.	2.1 Wait a while so the Unit has enough time to cool the room.
3. 'Clicking' sound is heard from the air conditioner.	3.1 In heating or cooling operation any plastic parts may expand or shrink due to a sudden temperature change in this event, a clicking sound may occur.	3.1 This is normal.
4. SET temperature can't be adjusted.	4.1 Unit is operating in AUTO mode. 4.2 The required SET temperature is outside of the allowable range.	4.1 Temperature cannot be set in AUTO mode. 4.2 SET temperature range is 16-30°C
5. Cooler is not operating at full power, or at all.	5.1 For residences with a Smart Meter, DRED (Demand Response energy saving) mode has been activated by the Electricity Supplier. codes 'd1', 'd2' or 'd3' are shown in the controller display.	5.1 This is not an air-conditioner fault, but a requirement from your Electricity Supplier. DRED mode will stop when the power grid demands are reduced.

TROUBLESHOOTING cont.

WARRANTY & SERVICE

For prompt, efficient service, please follow the above before calling the appropriate number below.

For Refrigerated Cooling Issues **1300 650 644**

When calling the Warranty Service number or booking an on-line service, please ensure you have your model and serial number available, along with date of purchase, and if possible a description of the problem. Refer to your Warranty Booklet for details, terms and conditions.

NOTE:

Seeley International strives for continuous product improvements, therefore specifications are subject to change without notice. Unit colour may vary slightly from that depicted in this booklet.

Installation and commissioning of this system to the manufacturer's specification, and compliance with industry standards, and local, state and national regulatory codes, are the responsibility of the installer.

Information in this booklet was true and correct at the time of publishing. E & OE.

NOTES

Warranty Registration (Australia Only)
To register your warranty, go to
www.seeleyinternational.com

Warranty Service
Australia: 1300 650 644
New Zealand: 0800 589 151

seeleyinternational.com

It is the policy of Seeley International to introduce continual product improvement.
Accordingly, specifications are subject to change without notice.
Please consult with your dealer to confirm the specifications of the model selected.